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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,022	12/03/2003	Gopal K. Chopra	03-389 (US01)	8331
41696	7590	12/04/2006	EXAMINER	
VISTA IP LAW GROUP LLP 12930 Saratoga Avenue Suite D-2 Saratoga, CA 95070			SOLANKI, PARIKHA	
			ART UNIT	PAPER NUMBER
			3737	

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/728,022

Applicant(s)

CHOPRA, GOPAL K.

Examiner

Parikha Solanki

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 5,6,8 and 14-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,7,9-13 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-24 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species:
 - **Group I:** the embodiment of Figures 1-3 of the instant application, directed toward an apparatus and method for using an ultrasonic transducer comprising a harness.
 - **Group II:** the embodiment of Figure 4 of the instant application, directed toward an apparatus and method for using an ultrasonic transducer comprising a catheter.
 - **Group III:** the embodiment of Figure 5 of the instant application, directed toward an apparatus and method for using an ultrasonic transducer comprising a hand-held device.

The species are independent or distinct because they are substantially different in structure and method of use, and as such would pose a serious search burden on the Examiner if treated in a single application.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1-4 and 9 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

2. During a telephone conversation with David Burse (408.777.2905) on 16 November 2006, a provisional election was made without traverse to prosecute the invention of Group II, claims 1-4, 7, 9-13 and 21-24. Affirmation of this election must be made by applicant in replying to this Office action. Claims 5, 6, 8 and 14-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Information Disclosure Statement

3. The information disclosure statements (IDS) submitted on 2 January 2004, 3 March 2004 and 13 April 2005 were filed after the mailing date of the original application for patent on 3 December 2003. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

4. The disclosure is objected to because it contains numerous typographical errors. The errors are as follows:

- Page 2, line 7: The word "is," appearing after the word "tissue," should be replaced with "are".
- Page 2, line 15: The word "prolong" should be replaced with "prolonged".
- Page 2, line 18: The word "sever" should be replaced with "severe".
- Page 3, line 7: The word "is," appearing after the word "transducer," should be removed.
- Page 6, line 7: The word "connector" should be replaced with "connectors".
- Page 10, line 6: The word "a" should be replaced with "an".
- Page 10, line 9: The word "an" should be replaced with "a".
- Page 10, line 19: The word "place" should be replaced with "placed".
- Page 16, line 15: The word "know" should be replaced with "known".
- Page 16, line 16: The word "include" should be replaced with "includes".

Appropriate correction is required. Additionally, Examiner recommends that Applicant review the entire specification with a spelling and grammar check program.

5. The use of the trademark Velcro has been noted in this application on page 6, line 7, and on page 7, line 6. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Drawings

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the acoustic energy sensor of claims 9 and 13 and the neurological signal sensor of claim 12 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

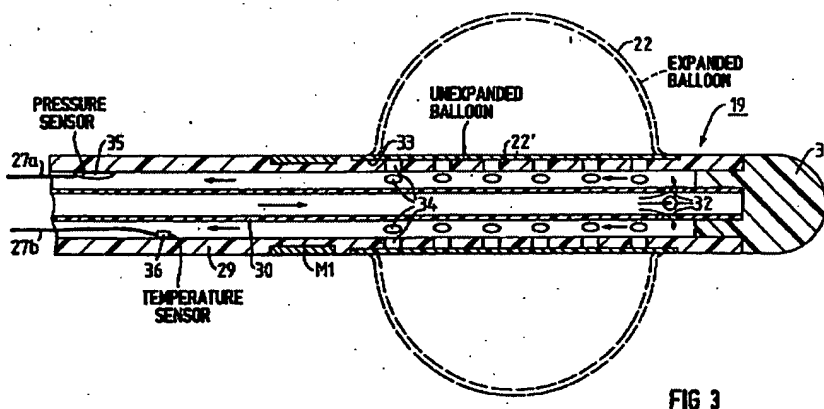
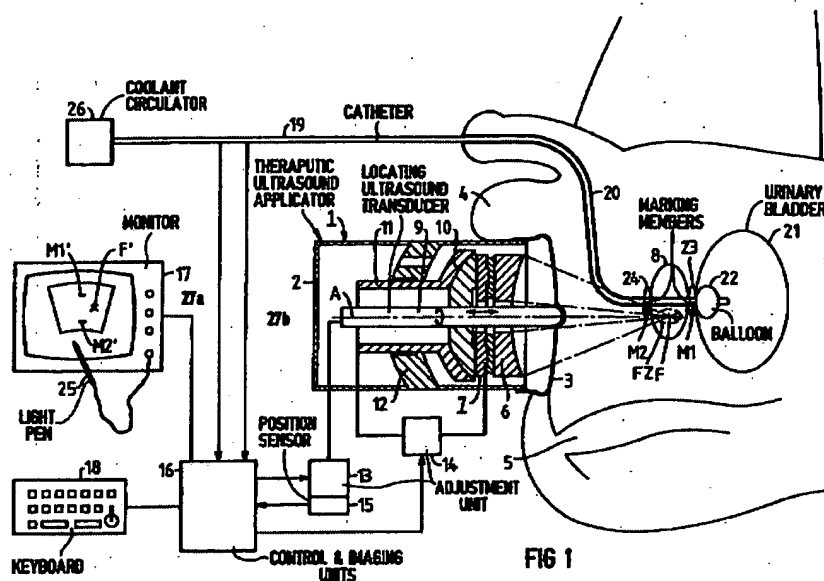
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-4, 7, 9-13, 21, 23 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Buchholtz (US Patent No. 5,409,006). Buchholtz ('006) discloses a method and apparatus for delivering acoustic energy to a target site (Abstract).

The apparatus of Buchholtz ('006) includes a catheter having a distal end, a proximal end, a lumen extending there between, a channel located adjacent to the transducer, a fluid source in fluid communication with the channel, and an acoustic energy sensor secured to the

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catheter distal end (col. 1 lines 56-61, col. 3 lines 27-43, col. 3 lines 61-68, col. 7 line 56 – col. 8 line 4, Figs. 1 & 3). While Buchholtz ('006) provides the embodiment for the treatment of benign prostate hyperplasia, Buchholtz ('006) states that the apparatus and method may be used to treat other maladies, and as such the acoustic energy sensor provided by Buchholtz ('006) is considered the same as a neurological signal sensor (col. 8 lines 30-32).



[Source: Buchholtz et al (US Patent No. 5,409,006)]

The method disclosed by Buchholtz ('006) includes the steps of introducing the catheter carrying the ultrasonic transducer into the patient's body, delivering acoustic energy to the tissue region, cooling the adjacent tissue to reduce unwanted heating, sensing a reflected

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acoustic signal, and analyzing the reflected acoustic signal to determine a location (col. 4 lines 34-37, col. 5 line 29 – col. 7 line 36).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buchholtz ('006) in view of Thompson et al (US PG Pubs. No. 2002/0055693). Buchholtz ('006) teaches all features of the present invention as detailed above. Buchholtz ('006) is silent with respect to whether a blood thinning agent is delivered to the tissue region prior to delivering acoustic energy. In the same field of endeavor, Thompson ('693) teaches a method and apparatus for thrombolysis via ultrasonic therapy, the method including the step of delivering an anticoagulant such as heparin or aspirin to the treatment area prior to delivering acoustic energy (§ [0081], § [0085]). Examiner asserts that the anticoagulants disclosed by Thompson ('693) constitute blood thinning agents as claimed in the instant application. At the time of invention, it would have been obvious to one of ordinary skill in the art to modify the method of Buchholtz ('006) to further include the step of administering an anticoagulant prior to ultrasonic therapy, in order to provide enhanced blood perfusion and promote thrombolysis, in view of the teachings of Thompson ('693).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fujio et al (US Patent No. 5,873,828), Arndt et al (US PG Pubs. No. 2001/0020178), Oppelt et al (US Patent No. 5,624,382) and Buchholtz et al (US Patent No. 5,472,405) teach related methods and systems for ultrasonic catheters with treatment and sensing components, including means for cooling the periphery of the distal transducer. Oliver et al (US Patent No. 6,958,040) teach a related method and apparatus for an ultrasonic therapeutic and sensing

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catheter for blood vessel thrombolysis, the catheter including a lumen for cooling fluid and the method including the step of administering heparin prior to delivering ultrasonic therapy.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Parikha Solanki whose telephone number is 571.272.3248. The examiner can normally be reached on M-F, 8 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571.272.4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Parikha Solanki
Examiner - Art Unit 3737



BRIAN L. CASLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :12/3/03, 01/02/04, 03/03/04, 04/13/05.